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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,805	06/26/2003	Toshiaki Fuse	239539US3	2796

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ALEXANDRIA, VA 22314

EXAMINER

CRANE, DANIEL C

ART UNIT PAPER NUMBER

3725

DATE MAILED: 09/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/603,805	Applicant(s) FUSE ET AL.	
	Examiner Daniel C Crane	Art Unit 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3,8 and 9 is/are rejected.
- 7) ☒ Claim(s) 4-7 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/6/2003</u> . | 6) <input type="checkbox"/> Other: ____. |

Art Unit: 3725

BASIS FOR REJECTIONS

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

REJECTION OF CLAIMS ON FORMAL MATTERS

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Failure to provide antecedence for "back side" in claim 8 renders the subject matter unclear. Further, the phrase "setting a pressing die pressing a front surface..." is not clear. Clarification and amendment of the phrase is required.

REJECTION OF CLAIMS OVER PRIOR ART

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Wachtell (3,621,700).

See all the Figures for a complete showing of the operation of the correcting deformation of a

Art Unit: 3725

gas turbine blade 33, 34, 37. Figure 1 shows that the stationary die 11B, 36 is fixed against the backside of the tip shroud 34. The pressing die 10B, 53A contacts a front surface of the tip shroud so as to press the tip shroud between the pressing die and the stationary die 11B, 36 thereby reforming the tip shroud. The hydraulic drive is shown in Figure 6 along with the control device. Since all the information of the workpiece is used to set the control device to properly sequence the deformation operation, the claimed control device is contemplated by Wachtell. Control of the system inherently monitors displacement and pressure in light of the fact that the system is sequenced to a predetermined operable nature.

Claims 2, 3, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wachtell (3,621,700). Wachtell shows that a tip shroud 33 or 34 can be reformed to correct the bent condition of the gas turbine blade 33, 34, 37. Since the blade is being reformed, it is clearly evident that the operator inspects the bent blade and determines the extent of reformation of the blade. With reference to Figure 6B, dies 53 and 53A contact opposed surfaces (back surface and front surface) of the tip shroud 34 so as to press the tip shroud into proper shape. While Wachtell does not indicate that the die is stopped during the pressing stage, it is clearly within the purview of the skilled artisan to do so so as to properly sequence the shaping operation. No new and unexpected result would be seen since the shaping the tip shroud would still occur. As to claim 2, this feature is considered an obvious provision in Wachtell's device in light of it being well known in the art to over bend material so as to impart a correct bend. Accordingly, it would have been obvious to the skilled artisan at the time of the invention to have modified Wachtell's device by providing the dies with the capability of over bending the tip shroud as well

Art Unit: 3725

known thereby imparting a correct bend in the material. As to claim 3, the control of the system inherently monitors displacement and pressure in light of the fact that the system is sequenced to a predetermined operable nature. As to claim 9, this feature is inherent in that the hydraulic system of the press determines the presence by virtue of continued operation of the pressing die until the necessary parameters are met and the system is shut down.

INDICATION OF ALLOWABLE SUBJECT MATTER

Claims 4-7 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

PRIOR ART CITED BY EXAMINER

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

RESPONSE BY APPLICANT(S)

Applicant(s) response to be fully responsive and to provide for a clear record must specifically point out how the language of the claims patentably distinguishes them from the references, both those references applied in the objections and rejections and those references cited in view of the state of the art in accordance with 37 CFR 1.111 (a), (b) and (c).

INQUIRIES

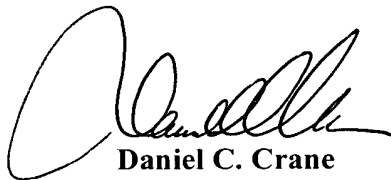
Art Unit: 3725

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner D. Crane whose telephone number is **(703) 308-1870**. The examiner's office hours are 6:30AM-5:00PM, Tuesday through Friday. The examiner's supervisor, Mr. Allen Ostrager, can be reached at **(703) 308-3136**.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is **(703) 308-1148**.

Documents related to the instant application may be submitted directly to Group 3700 by facsimile transmission at all times. Applicant(s) is(are) reminded to clearly mark any transmission as "DRAFT" if it is not to be considered as an official response. The Group 3725 Facsimile Center number is **(703) 872-9306**.

DCCrane
August 27, 2004



Daniel C. Crane
Primary Patent Examiner
Group Art Unit 3725